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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/737,306

12/16/2003

Robert Haines Turner

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EXAMINER

BEFUMO, JENNA LEIGH

ART UNIT

PAPER NUMBER

1771

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/737,306

Applicant(s)

TURNER ET AL.

Examiner

Jenna-Leigh Befumo

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The response filed on November 9, 2006 has been entered. Claims 1 – 27 are pending.
2. The 35 USC 102 rejection over Tranfield (3,684,284) is withdrawn since Tranfield does not teach that the composite has regions of fibers extending from the surface of the nonwoven fabric in the final product.
3. withdrawn rejection of claim 11
4. The 35 USC 102 rejection to claims 11, 12, 16, and 27 based on Provost et al. (2004/0157036) are withdrawn since Provost et al. does not teach that the tuft region has fibers which are neither integral with nor extending from the first region. Also, the rejection over claim 27 is withdrawn since Provost et al. fails to teach that the tufted layer is placed between a topsheet and backsheet.
5. The 35 USC 102 rejection to claims 11 – 13, 15, and 16 and the 35 USC 103 rejections to claim 14 based on Sormachi et al. (5,508,080) are withdrawn since Sormachi et al. does not teach that the tuft region has fibers which are neither integral with nor extending from the first region.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
7. Claims 1 – 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
8. Claim is considered indefinite since it unclear the structure of the second region of the fibrous web. Specifically, the second region has a discontinuity and a deformation. The claim

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states that the deformation extends from the first region, but it is unclear how the discontinuity relates to the first region or the deformation. The spatial relationship between the claimed components is unclear. Do the discontinuities have to contact the deformations or first region at all? How do the linear orientation and the longitudinal axis of the discontinuity relate to the deformation? Claims 11, 17, and 21 are similarly rejected. Further, claims 2 – 10, 12 – 16, 18 – 20, 22, and 23 are rejected due to their dependencies on claims 1, 11, 17, or 21.

9. The phrase “fiber neither integral with nor extending from the first region” in claim 11 is indefinite. It is unclear how the second part of the description, nor extending from the first region” further defines the fibers which are not integral with the first region. How can a fiber which is separate from the first region either extend or not extend from said first region. Does the fiber need to be parallel to the first region so that if the fiber extended on it would not intersect with the first region. What structure is added by the second phrase? Claims 12 – 16 are rejected due to their dependency on claim 11.

Claim Rejections - 35 USC § 102

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

11. Claims 1 – 5, 8 – 10, 17 – 21, and 23 – 26 stand rejected under 35 U.S.C. 102(e) as being anticipated by Provost et al. for the reasons of record.

12. Claims 1 – 6, 8, 10, and 17 – 27 stand rejected under 35 U.S.C. 102(b) as being anticipated by Sorimachi et al. for the reasons of record.

13. Claims 1 – 3, 9, 10, 17 – 21, and 24 – 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Hansson (6,048,600).

Hansson discloses a composite nonwoven fabric having a corrugated first layer having a row of mutually parallel waves having crests and troughs, wherein the crests comprise opening extending through the crest regions (abstract). Thus, the trough regions correspond to the applicant's claimed first region and the crests correspond to the applicant's claimed second region. The openings of the crests would read on the claimed discontinuities and the remainder portion of the crest would read on the applicant's deformation. And the discontinuity has a linear orientation and longitudinal axis within the fabric plane. Further, the first layer is made from a hydrophobic nonwoven material (column 3, lines 25 – 30). Thus, the crest regions would comprise a plurality of fibers extending from the first region. Thus, claims 1 – 3, 9, 10, 17 – 21, and 24 – 26 are anticipated. It is noted that the claims reciting that the material is used as a topsheet, wipe, or absorbent article are not given weight with respect to the claimed product because a recitation of how a product is used does not change the structure of the product itself. Therefore, these limitations do not add any structural limitations to the claimed product.

Claim Rejections - 35 USC § 103

14. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

15. Claim 7 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Sorimachi et al. in view of Kotek et al. (6,120,718) for the reasons of record.

16. Claims 4 – 8, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansson.

The features of Hansson have been set forth above. Hansson discloses that the top layer can be a nonwoven hydrophobic material. Hansson fails to teach using specific types of fibers in the nonwoven material. However, it would have been obvious to one having ordinary skill in the art to

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on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416. Further, it would have been obvious to one having ordinary skill in the art to choose bicomponent fibers or non-round fibers depending on the end-use of the product and the properties required for said end-use. Thus, claims 5 – 7 and 23 are rejected.

Further, Hansson fails to teach using a nonwoven fabric with randomly oriented fibers. However, only of ordinary skill in the art would know that randomly oriented fabrics provided uniform strength and stability properties in all directions. Further, it is well known that materials such as spunbond or meltblown fabrics which are readily available and provide good strength properties are randomly oriented. Thus, one of ordinary skill in the art would choose randomly oriented materials as the top sheet of the product taught by Hansson because the randomly oriented fabrics have improved strength and stability properties. Thus, claims 4 and 22 are rejected.

Finally, Hansson fails to teach the number of second regions per square centimeter. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the number of crests per centimeter, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955). One of ordinary skill in the art would be motivated to produce sufficient crests per centimeter so that the comfort of the liquid permeable composite is maintained and liquid readily passes into the supporting layers and does not remain on the surface of the composite. Thus, claims 8 is rejected.

Double Patenting

16. Claims 1 – 27 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 3 – 15 of copending Application No. 10/737,235 for the reasons of record.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

17. Claims 1 – 27 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 – 20 of copending Application No. 10/737,430 for the reasons of record.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

18. Claims 1 – 27 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 – 21 of U.S. patent 7,172,801 (formerly Application No. 10/737,307) for the reasons of record.

US Application 10/737,307 been allowed and is now patent No. 7,172,801. Thus, the rejection has been changed to reflect the most recent status of the application and is no longer a provisional rejection.

19. Claims 1 – 27 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 – 44 of copending Application No. 10/737,640 for the reasons of record.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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20. Claims 1 – 27 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 – 25 of copending Application No. 11/156,020 for the reasons of record.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

21. Applicant's arguments filed November 9, 2006 have been fully considered but they are not persuasive. For purposes of simplifying prosecution, the features of the claims will be broken into separate parts and addressed individually to respond to the applicant's arguments. Further, for purposes of simplicity, only those features which are being argued by the applicant will be addressed.

22. First, in claim 1, the applicant argues that the prior art fails to teach a discontinuity exhibiting a linear orientation and defining a longitudinal axis. First, it is noted, that based on the applicant's arguments, the applicant defines a discontinuity as having an absence of fibers. However, based on the general definition of the discontinuity, the term is not limited to such in the claim. And further, there is nothing in the claim or the disclosure which limits the term discontinuity to a region with an absence of fibers. The applicant is arguing features which have not been claimed, and therefore, the arguments are not commensurate in scope with the claims.

Instead, a discontinuity is interpreted as any change in the structure of the batt being fiber density, fiber orientation, or structure. Thus, the entanglement and change in the fiber positioning of the batt caused by needlepunching through the batt and forming the tuft or deformation region would correspond to a discontinuity within the fibrous batt. Further, the density of the fibers within the batt is also decreased from the other regions that are not needlepunched since fibers from the

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batt have been moved to for the tuft region. Thus, the batts disclosed by Sormachi et al. and Provost et al. comprise a discontinuity. Further, in Soramachi et al., it is noted, that where the tuft region punches through the upper layer a hole or gap is formed in the second layer. This hole would also correspond to the claimed discontinuity since the applicant has how limited how the discontinuity is connected to the other regions in the composite. The applicant's argument that the batt cannot include fibers where the discontinuity is present is not commensurate in scope with the arguments.

23. Additionally, the applicant argues that the discontinuity in the prior art does not have the claimed linear orientation. The claim recites a second region having at least one portion being a discontinuity exhibiting a linear orientation and defining a longitudinal axis. The term "linear" is defined as consisting of or using lines; pertaining to or represented by lines, extended or arranged in a line, or having the form of or resembling a line (Dictionary.com). The term "orientation" is defined as the act or process of orienting or being oriented or one's position relative other points (Ditionary.com). The linear orientation claimed appears to be an imaginary line which can be mapped onto the fibrous web within the discontinuity. Thus, the limitation is interpreted as requiring that an imaginary line of any length can be mapped onto said discontinuity. A line by definition is any distance between two points. Therefore, the imaginary line that has to be mapped onto the discontinuity only needs to be greater in size than a point. The claim does not require a discontinuity of a specific size.

Further, the claim requires that the discontinuity has a longitudinal axis. Longitude is interpreted as being one direction of a coordinate system, which in this case has to be in MD-CD plane of the web. Thus, the longitudinal axis must be within the body of the fabric in any direction. However, the claim does not specify the length or direction of the longitudinal axis. Again, the

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claimed longitudinal axis just requires that an imaginary line can mapped onto the discontinuity within the MD-CD plane of the fabric. Thus, any shape larger than a point can has a linear orientation and would have a longitudinal axis within the plane of the fabric. Therefore, the rejection is maintained because the circular indentions produced by Provost et al. and Soramachi et al. can have a line mapped over them creating a linear orientation and a longitudinal axis.

The applicant's argues that this limitation excludes circles because all points of the circle are equidistant from the center of the circle. However, these arguments are not commensurate in scope with the claimed structure. There is nothing within the definition of linear or longitudinal that exclude specific shapes from being given a linear orientation or a longitudinal axis. The applicant is improperly reading limitations from the specification into the claims. These features are imaginary lines mapped onto a surface and how the lines or axis are mapped onto the discontinuity itself is open to interpretation. For instance, when looking at the prior art from a larger perspective, the needled regions are needle in rows creating lines of discontinuities which would also produce a linear orientation and longitudinal axis which passes through the plurality of discontinuities. Thus, the lines themselves can be part of a larger picture which pass through the discontinuities. It is suggested that the applicant recite the specific structure of the discontinuity itself and not try to claim the structure by imaginary lines which can be mapped onto the discontinuity, i.e., requiring the discontinuity to be an open space free of fibers below the deformation which comprises the plurality of tufts extending from the surface of the web or by reciting that the discontinuity and deformation have an overall length and width and that the length is greater than the width.

24. Further, the claims recite that the second regions of the web also include a deformation which comprises a plurality of tufts extending from the first region. This feature is taught by the prior art since both Provost et al. and Sormachi et al. disclose a region with fibers extending

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vertically above the surface of the fabric. Therefore, the applicant's arguments that the prior art fails to teach a discontinuity with a linear orientation and a longitudinal axis and a deformation are not found persuasive.

25. With regards to claim 24, which recites that the fibrous web comprises a plurality of discrete regions of fiber reorientation on at least said first surface, each said discrete region having a linear orientation defining a longitudinal axis and comprising a plurality of fibers having portions reoriented in a direction substantially orthogonal to the MD-CD plane, these features again require a longitudinal axis and linear orientation to mapped onto the discrete regions in some manner. The same arguments with regards to the term longitudinal axis and linear orientation apply to this claim, as set forth above. Thus, a linear orientation and longitudinal axis defined by the line of discrete regions formed by needlepunching would pass through each discrete region forming the required linear orientation and longitudinal axis. Therefore, the rejection is maintained.

26. Finally, it is noted that the applicant argued that the rejection based on Provost et al. is not proper since Provost et al. is nonenabling for the claimed invention. Specifically the applicant argues that Provost et al. does not teach how to make the tufted fibrous web without a second layer to be part of the structure. However, the claims do not exclude a second layer. The claims all use comprising language to describe that claimed web. Therefore, the prior art can teach additional layers are present in the composite structure. Further, the claims in no way require that the fibrous web be used by itself or be a stand alone structure. Thus, the applicant's arguments are not commensurate in scope with the claims. Therefore, the rejections are maintained.

Conclusion


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (571) 272-1472. The examiner can normally be reached on Monday - Friday (8:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jlb
January 19, 2007


JENNA BEFUMO
PRIMARY EXAMINER